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ADDIS ABABA UNIVERSITY

College of Business and Economics

Department of Management

**Determinants of Fruit and Vegetable Export Performance in
Ethiopia**

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Advisor: Yared Asrat (PhD)

**A Thesis Submitted to Addis Ababa University, College of Business and
Economics, Department of Management, For the Partial Fulfillment of the
Requirements for the Award of Master of Science in International Business
under the Specialization of Import and Export Management**

June, 2023

Addis Ababa, Ethiopia

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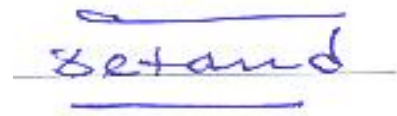


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Declaration

I, Jabesa Boja, hereby declare that the dissertation titled "Determinants of fruit and vegetable export performance in Ethiopia" is entirely the result of my own work and that it has not been submitted, in whole or in part, in any prior application for any degree or professional qualification. References used are acknowledged in the literatures and resources.

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Date: June, 2023

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This is to approve that the study paper written by Jabesa Boja on the "Determinants of fruit and vegetable export performance in Ethiopia" is his own research. All sources have been properly acknowledged. This work has never been submitted for another degree and is free of plagiarism.

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Signature :

A handwritten signature in cursive script, appearing to read 'Yared', written above a solid horizontal line.

Date: June, 2023

Acknowledgements

I want to start by thanking the Almighty God. Next, I want to sincerely thank Yared Asrat (PhD), my supervisor, for making this thesis possible. My sincere gratitude also goes out to the exporters of fruits and vegetables and to everyone who gave me useful information. Special thanks go to my little brother Moti for the encouragement and support he gave me. Last but not least, I want to thank my wife Fenan Mereid for all of her support, love, and encouragement throughout my education.

Thank You All!

Abstract

With comparative advantage due to its close proximity to markets, Ethiopia has a significant potential for the production and export of a variety of fruits and vegetables that can be competitive on the global market. However, the export of products and services has continually resulted in low export earnings for the country. Although fruits and vegetables make up a substantial amount of Ethiopia's export industry, the potential of the region is not yet fully used. Accordingly, the main goal of conducting this study is to investigate the determinants of fruits and vegetables export performance in Ethiopia which includes the variables examined: export market challenges, company barriers, product barriers, institutional support issues, government policy and regulatory factors, and export industry barriers. Moreover, the researcher employed a mixed research strategy, which incorporates both qualitative and quantitative research approach, as well as non-probability sampling, purposive sampling technique is employed in this study to accomplish the study's objective. The investigation was conducted using both primary and secondary data sources. Questionnaires were used to gather the main data. The study considers 135 active exporters of fruits and vegetables were chosen as a sample and from those 124 were valid and used in the analysis of the results. Numerous websites, papers, and studies in the area were used as the secondary data. Descriptive and inferential statistics were used to examine the acquired data in order to get to relevant facts and conclusions. The study's findings demonstrated that barriers linked to the export product, institutional support, and foreign export market, had a significant impact on Ethiopia's ability to export fruits and vegetables. Finally, based on the study's findings, the researcher has been able to offer advice to government agencies, policy makers, and exporters of fruits and vegetables on how to lessen the impact of these factors on Ethiopia's export performance.

Key Words; Fruits and vegetables, Export Performance, Ethiopia

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List of Acronyms

ANOVA	Analysis of Variance
CSA	Central Statistical Agency
CGGS	Center on Globalization, Governance and Competitiveness
ERCA	Ethiopia Revenue and Customs Authority
EHPEA	Ethiopian Horticulture Producer Exporters Association
EIA	Ethiopian Institute of Agriculture
FDI	Foreign Direct Investment
FY	Fiscal Year
GATT	General Agreement on Tariffs and Trade
LDCs	Least Developing Countries
MNC	Multinational Corporation
MoT	Ministry of Trade
NBE	National Bank of Ethiopia
SPSS	Statistical Package for Social Science
UNCTAD	United Nations Conference on Trade and Development
VIF	Variance Inflation Factor
WTO	World Trade Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The expansion of international trade is one of the most significant manifestations of economic globalization. While some developing countries have performed well in world markets, numerous have struggled to become fully integrated into the world trading system (World Bank, 2014). The progressive liberalization of world trade through the negotiations on the General Agreement on Tariffs and Trade (GATT) and the founding of the WTO have opened up possibilities for developing countries to access the markets of industrialized countries more easily. In particular, efforts to reduce agri-food trade barriers, including tariffs, quantitative restrictions and other trade barriers, offer opportunities for improved export performance for both traditional and non-traditional products (Spencer and Rupert, 2001).

Exporting activity is of extreme importance from the point of view of nations and firms. From the point of view of national governments, exporting activity is crucial because it contributes to the economic development of nations (Begovic and Ciftcioglu, 2008). It influences the amount of foreign exchange reserves as well as the level of imports a country can afford, while shaping public perceptions of national competitiveness. Additionally, exports enhance societal prosperity and help national industries to develop, improve productivity and create new jobs. Abroad, exports enlarge consumers' accessibility to a diversity of goods and services, and improve the standard of living and quality of life (Lages and Montgomery, 2004).

According to the WTO (2019), export performance and economic growth relations are becoming the main agenda of international and regional development programs worldwide. This is because foreign exchange earnings, increased utilization of idle human and capital resources, a concentration of investment on areas where there is a comparative advantage, access to technological knowledge, and increased foreign exchange earnings can all be attributed to international trade as a significant driver of rapid economic growth (UNCTAD,2015). Increasing export performance is extremely beneficial to economic growth for developing nations like Ethiopia. In addition, Ethiopia has had a significant need for foreign currency recently due to a

rise in the import of capital goods needed to fuel and sustain economic growth as well as meet rising consumer demand for imported consumer products (Degife, 2014).

On the world market, trading in fruit and vegetable products is one of the most dynamic areas of international agricultural trade, boosted by rising incomes and growing consumer interest in product variety, freshness, convenience and year-round availability. Advances in production, post-harvest handling, processing and logistics technologies and increased levels of international investment have played an enabling role (Ndiame and Steven, 2004).

African exports of horticultural and processed agricultural products are growing rapidly, in line with the strong shift towards these products in world markets. Equally impressive has been the export-driven growth of horticulture in a number of sub-Saharan countries in recent decades. Small farmers' participation in the production of fresh produce, which is primarily exported to the European Union, has aided in the eradication of poverty and the development of rural areas. (Ahmed, 2018).

The area of export performance is attracting increasing attention from both academia and business management. Extensive studies have examined internal and external determinants of export performance. Research on export activity remains relevant as exports are the first step in the internationalization process and due to the dynamic nature of international trade, constant follow-up and conduct of research is required to increase fruit and vegetable export performance in Ethiopia. Despite promising potential for the development of the subsector, Ethiopia's export performance is still subpar given its wealth in natural resources and other competitive advantages (Sisay, 2018).

Ethiopia has latent potential for producing and exporting fruit and vegetables, as the research of Degafe (2013) and Sisay (2018) demonstrates, yet the nation continuously earns little money from the export of commodities and services. The complexities of the international commercial environment have also rendered Ethiopian studies on this topic insufficient. Therefore, the goal of this study is to identify and analyze the factors that affect Ethiopia's export performance of fruits and vegetables.

1.2 Statement of the Problem

Trade in fruit and vegetable products is an important aspect of international agricultural trade as consumer interest in year-round availability, freshness, convenience, product variety and rising incomes grows. Advances in production, post-harvest handling, processing and logistics technologies, as well as an increased level of international investment, have played a beneficial role. For developing countries, trade in these products has been attractive given the highly volatile or declining long-term price trends for many traditional export products (Luis and David, 2002). Although many developing country suppliers have entered this field, relatively few have achieved significant, sustained success, reflecting the fact that the industry is highly competitive and rapidly changing (World Bank, 2005).

Many African countries, including Ethiopia, perform poorly in terms of fruit and vegetable exports. This is due to a lack of agricultural technology, expensive transportation and logistical costs, underdeveloped supply chains, and limited market access. Furthermore, high production costs, including inputs such as fertilizers and seeds, make it difficult for farmers to raise output while improving product quality (WB, 2020). According to Ousmane and Pierre (2021), most African countries' fruit and vegetable export performance lags behind in the competitive race. Most countries' competitiveness has dropped, as assessed by Africa's proportion of global agricultural exports. Many developing countries, like Indonesia, Thailand, and Brazil, now export more fruits and vegetables than Sub-Saharan Africa as a whole.

Ethiopia has a long history of engaging in international trade, but the country has not reaped the benefits as anticipated, and its trade balance has been significantly negative for many years. This is mostly a result of the Country's subpar export performance, heavy reliance on agricultural products, lack of diversification in export goods and destinations, and production of goods that are identical to those produced by the majority of sub-Saharan African countries and the area. (IMF,2014). Inadequate trade logistics, strict regulatory requirements, an unfavorable macroeconomic policy mix, and the underdevelopment of the private sector have all contributed to Ethiopia's export performance being hindered(Kebede, 2011). Inadequate internal transportation infrastructure, access to overseas markets, import restrictions imposed by

Ethiopia's trading partners, national income of partners, and distance are further obstacles. (Tekaligne, 2009).

In comparison to Ethiopia's enormous potential to enhance fruit and vegetable exports, the country's performance as an exporter of those goods to the rest of the world is pitiful. Although the country has rich resources for growing fruits and vegetables and a production-friendly climate, the export performance of these commodities remains low compared to other African countries such as Morocco, South Africa and Nigeria (Gebissa, 2020). The fruit and vegetable export industry have the potential to make a significant contribution to the Ethiopian economy. This potential might be unlocked and used to spur economic growth with a better knowledge of the variables impacting export performance (Yeabsira, 2014).

Over the past three decades, numerous studies have addressed the determinants of export performance. However, the majority of these empirical studies have been carried out in rich countries, and it is frequently noted that there is a dearth of empirical study in developing countries, which also applies to the Ethiopian export sector. Particularly, the empirical evidence used to explain the determinants of fruit and vegetable export performance in Ethiopia is very few. Moreover, it is important to identify the challenges in international trade and how they are affecting the country's export performance. To fill this knowledge gap, this study takes a comprehensive approach to identify and examine the internal and external drivers of export performance by drawing on evidence from fruit and vegetable exporters in Ethiopia.

1.3 Research Questions

1.3.1 Main Research Questions

What factors affect Ethiopia's export performance for fruits and vegetables?

1.3.2 Specific Research Questions

1. What are the barriers inside the exporting company that determine the fruit and vegetable export performance in Ethiopia?
2. What is the product related barriers that affects the fruit and vegetable export performance?

3. What are the institutional support-related obstacles affecting Ethiopia's fruit and vegetable export performance?
4. How policy and regulation environment affect the export performance of fruit and vegetable in Ethiopia?
5. How does the success of Ethiopian businesses' exports of fruits and vegetables depend on the domestic export market?
6. How the barrier in foreign market does affects the export performance of the export of fruits and vegetables in Ethiopia?

1.4 Objective of the Study

1.4.1 General Objective

The general objective of this study is to assess and examine the determinants of fruits and vegetables export performance in Ethiopia.

1.4.2 Specific Objective

Under the theme the general objective, the study has the following specific objectives: -

- ☒ To determine the internal exporting firm constraints that affect Ethiopia's fruit and vegetable export performance.
- ☒ To investigate how Ethiopia's export performance for fruits and vegetables is impacted by product-related constraints
- ☒ To investigate how Ethiopia's institutional support environment affects the success of its fruit and vegetable exports,
- ☒ To investigate how Ethiopia's export performance for fruits and vegetables is impacted by government policy and regulation constraints
- ☒ To evaluate the impact of domestic export sector challenges on Ethiopia's performance in the export of fruits and vegetables.
- ☒ To investigate how Ethiopia's export performance for fruits and vegetables is impacted by obstacles in the global export market.

1.5 Significance of the Study

This study aims to investigate the factors that influence the export performance of fruits and vegetables in Ethiopia, which has received inadequate research attention given the dynamic of the international trading environment. Consequently, the study findings could contribute to understanding how international trade environment, the domestic export industry environment and internal problems of fruit and vegetable firms are affecting the Ethiopia's export performance. In addition, the findings could potentially benefit decision-makers, the fruit and vegetable industry, and government agencies by improving their understanding of export marketing, strategies, and competitiveness. Moreover, this research could help the students improve their analytical skills and contribute to the field of international trade literature, potentially guiding future studies in this area.

1.6 Scope of the Study

The focus of this study is narrowed thematically to analyze Ethiopia's fruit and vegetable export performance factors. Geographically, this study focused on the active fruit and vegetable exporters based in Addis Ababa during 2021/22FY. The exporting firms who reside in Addis Ababa were deliberately chosen to facilitate data collecting and to manage the research within the constraints of time and resources. This study also employed the data series of Ethiopia's fruit and vegetable export performance for 10 years, from FY 2012/13 to FY 2021/22 G.C., to assess export performance patterns.

1.7 Limitation of the Study

Numerous factors, including the availability of well-organized and high-quality data series on the success of fruit and vegetable exports, may have an impact on the study's findings. The study is also limited by time and resource constraints, impacting the quality and depth of the research. In addition, the sample size employed and the geographical delimitation in this study is small compared to the number of fruit and vegetable exporters in Ethiopia, the results obtained in the study is specific to the population studied, making it difficult to generalize to other settings. Therefore, the conclusions drawn may not accurately reflect the barriers that hinder the

performance of other exporters of fruits and vegetables in Ethiopia. Notwithstanding all these limitations, the researcher exhausted all possibilities to achieve the desired result.

1.8 Definition of Terms

- ✓ **Export Performance:** The term Export Performance refers to the success of a firm in carrying out export activities. It involves assessing the volume of exports, market coverage, profitability, competitiveness, and growth prospect of the firm's exports.
- ✓ **Export barriers;** an export barrier refers to any obstacle that makes it difficult or impossible for businesses or individuals to export goods or services to other countries. Export barriers can be caused by a range of factors, such as tariffs, quotas, trade restrictions, political instability, and legal or regulatory barriers.
- ✓ **Internal Barrier:** refers to the obstacles that exist within the organization, which hinder or limit the export development process. These may include lack of specific managerial skills, inadequate resources, organizational structure, product quality and design, production capacity, etc.
- ✓ **External Barrier;** refers to the obstacles that firms encounter while exporting, and that are beyond their control. These may include foreign trade regulations, legal complexities, economic instability, political instability, cultural differences, lack of market information, transportation and logistics difficulties, and competition from established local firms.

1.9 Organization of the Study

The research project is broken up into five separate chapters. The first chapter of the work deals with the introduction, which covers the background of the study, the statement of problem, the study's goals, meaning, scope, and constraints. The literature review, which covers both theoretical and empirical literature, is the main topic of the second chapter. The research methods and design are covered in detail in the third chapter. Sub-topics included in this are the data collecting source, data collection instrument, target group, sample size, research design, research technique, and data analysis method. Chapter four examines the results of the study with data analysis, presentation and interpretation and lastly the fifth chapter presents a summary of the research findings, conclusions and the recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Export Performance

The primary theory as to why countries trade with each other is to solve their economic problem. It is the inequality in the resources of countries that makes foreign trade possible. Both exporting and importing countries gain from international commerce (Chabowski, et.al, 2018). In addition, the international market also helps to understand the business. As a result, the business boosts its efficiency by partnering with various overseas businesses, which help it to use advanced technology and improve quality, whereby the technology and enhancing quality can help maintain financial stability (Onyusheva, 2018).

Export performance refers to a company's ability to successfully enter a foreign market with a product or service through strategic preparation and execution. A company's contribution to the export industry is acknowledged in addition to its export performance (P.K. Chugan, 2015). Since successful export precedes greater engagement in international markets, strategic export approaches are invaluable to managers and researchers in their long-term internationalization efforts (Johanson and Vahlne, 2009).

Additionally, organizations' export performance is thought of as a performance metric. There was, however, no widely accepted notion accessible despite substantial research into export performance and its history. In this instance, many scientists stand in for various ideas. According to Navarro et al. (2010), "export performance" refers to a company's capacity to meet its objectives when selling goods in overseas markets. The outcome of consistent activity in the export market is export performance (Chen,J.et al. (2016).

Most of theoretical aspect of export performance focuses on the resource-based view, transaction cost theory, and institutional theory to understand why some countries are more successful in exporting than others.

1. Resource Based View/ Dynamic Capabilities: The resource-based view emphasizes the importance of a country's resources, such as natural resources, human capital, and technology, in determining its export performance. This theory suggests that countries with abundant resources are more likely to be successful in exporting than those with scarce resources. The RBV asserts that firms can achieve a sustainable competitive advantage based on the organization of their resources (Wernerfelt 1984). The resource structure-performance perspective (Barney et al., 2001; Brouthers et al., 2008;) suggests that how an organization uses its skills and resources has a significant impact on performance; Companies that align their organizational structure with the skills/resources they have will perform better.

2. Transaction Cost Theory: This theory focuses on the transaction costs associated with exporting, such as transportation costs, communication costs, and legal costs. This theory suggests that countries with low transaction costs are more likely to be successful in exporting than those with high transaction costs. More specifically, TCE describes how trading partners protect themselves from dangers within exchange relationships (Williamson 1975, 1979). TCE helps explain how exchange partners choose between institutional alternatives and establish trading arrangements that provide protection from adverse action while focusing on lowest total cost.

3. Institutional Theory: Institutional theory emphasizes the importance of a country's institutional framework, such as its legal system, political system, and regulatory environment, in determining its export performance. This theory suggests that countries with strong institutions are more likely to be successful in exporting than those with weak institutions. A firm must modify the structure through which its capabilities are deployed to better fit with both the skills it possesses and institutional demands in order to perform better in these scenarios (Brouthers et al., 2008). According to Sirmon et al., 2007, due to institutional variations that affect the value of firm-specific competencies, exporting enterprises may choose a different organizational structure from domestic firms.

2.1.2 An Overview of World Fruit and Vegetable Trade

According to the World Trade Review (2022), world fruit and vegetable trade is a significant component of global agricultural trade, with a rapidly expanding trend in recent years. Fruit and

vegetable trade accounts for approximately 10% of global agricultural trade, with a value of around \$100 billion annually. Several factors have contributed to the growth of world fruit and vegetable trade, including increased demand for fresh produce from both developed and emerging markets, changes in global dietary habits, and advancements in transportation and logistics infrastructure that have made it easier and more efficient to transport perishable goods over long distances (Hess and Sutcliffe, 2020).

The largest exporting countries of fruits and vegetables are Brazil, China, Spain, the Netherlands, and Mexico. These countries account for a significant share of the global trade in fresh produce. The largest importing countries include the United States, Germany, the United Kingdom, Japan, and Russia (Emlinger et al. 2008). The most commonly traded fruits and vegetables include bananas, apples, citrus fruits, grapes, mangoes, berries, melons, tomatoes, onions, peppers, and carrots. However, the range of products traded has become more diverse over time, with increasing demand for specialty and exotic fruits and vegetables, such as avocados, kiwis, and dragon fruit (Frederiks and Nagy, 2021).

One significant challenge in world fruit and vegetable trade is the need to maintain quality and safety standards, especially given the perishable nature of these products. Many countries have implemented regulations and standards related to food safety, pesticide use, and packaging and labeling requirements. Compliance with these standards can be a significant barrier to entry for smaller producers and exporters, although it can also provide a competitive advantage for firms that are able to meet and exceed these standards (Suharni, et.al, 2016). Overall, world fruit and vegetable trade will likely continue to expand in the coming years, driven by changing consumer preferences, increasing demand in emerging markets, and advancements in transportation and logistics. With careful planning and investment in quality and safety standards, firms and countries can position themselves to take advantage of these opportunities and succeed in the global marketplace (Lusk, J. L., & Briggeman, B. C. (2017).

2.1.3 An Overview of the Ethiopia's Fruit and Vegetable Production and Export

Ethiopia has a long tradition of producing fruit (bananas, pineapples, mangoes, citrus) for home consumption and export to neighboring countries, but it is only recently that investments have been made in larger-scale production and in less traditional fruits (strawberries, avocados, table

grapes, passion fruit), supported by USAID's Ethiopia Agribusiness and Trade Expansion Activity (EHPEA, 2019).

Ethiopia's fruit productions and exports play a significant role in the local economy as a means of earning livelihoods for nearly five million of farmers, creating jobs and generating foreign exchange revenues. Also, the fruit crops sub-sector is one of the priority strategic sectors recognized by the GOE for its potential for private sector investments and exports (USDA, 2018).

The country's soil and climate are favorable for most popular fruits including apples, avocados, strawberries, pineapples, oranges, lemons, bananas, papayas, mangoes and watermelons. From Tigray, Amhara, Benishangul Gumz, Oromia and Dire Dawa, all regions of Ethiopia are suitable for growing various fruits. Just as other crops and vegetables, most of these fruits are grown by small farmers. Meanwhile, in recent years, especially after the country opened its doors to flower growers, some international companies have engaged in the production of fruits like strawberries, primarily with an eye on the export market (Andualem, 2022).

1. Production: Vegetables, including tomatoes and onions, potatoes, strawberries, plantains, and bananas, are the main fresh products exported from Ethiopia. The majority of these are shipped to countries outside of Europe, like Somalia, Djibouti, or in the case of strawberries, Saudi Arabia and the United Arab Emirates. The export of beans, leeks, peas, and grapes may be more than thought because, interestingly, the mirror data (or: worldwide import value from Ethiopia) reveals different values than the Ethiopian export value (Nimona, 2018).

The Central Statistics Agency (CSA) reports that Ethiopia's overall fruit production, which was approximately 410,000 tons in 2005, nearly doubled in 2018 to 800,000 tons. However, fewer than 50,000 tons have been sold, and the majority of the products are consumed by the producers. It has risen from approximately 45,000 hectares in 2005 to approximately 120,000 hectares in 2018. As for productivity, it has fallen from about 9.4 tons per hectare in 2019 to 7 tons per hectare in 2005 (Fantu and Bart, 2021).

East Shewa (central Ethiopia in Oromia Regional State) produces both fruits and vegetables, including tomatoes, green beans, oranges, tangerines, papayas, etc. East Hararghe (eastern part of the country, i.e. Alemaya and Kombolcha districts in Oromia Regional State) produces primarily

vegetables. Dutch-Ethiopian collaboration: a fruit and vegetable agenda 10 West Shewa (in the regional state of Oromia in central Ethiopia), which is ideal for the production of, among other things, tomatoes and mango fruits. Both Gamo Goffa (Southern Nations, Nationalities and Peoples Regional State), especially the Woliata and Sidama zones, and Arsi (Central Ethiopia in Oromia Regional State), particularly in the Awash River Basin, are excellent producers of bananas, avocados, pineapples, papayas, and other fruits and vegetables in various districts.. Dire Dawa and Harari (Eastern Ethiopia) are also well-known production and delivery areas for fruit and vegetables and also regions of Tigary and Amhara are produce(Ethiopian Export Promotion Agency, 2022).

2. Export: The most promising fruits in terms of production and export potential are avocado and banana, according to the USDA Ethiopia Fresh Fruits Market Update Report for September 2018. Avocado production has more than doubled in the last five years. With a yield of about 500,000 tonnes, banana is the most widely grown fruit crop. Mango is another popular fruit, with production increasing by 45% from 70,000 tonnes in 2013/14 to 105,000 tonnes in 2017/18.

Furthermore, Ethiopia has a massive domestic market for both fresh and processed fruits and vegetables that greatly outnumbers the export volume. Ethiopia's largest fruit and vegetable export markets are the neighbouring countries of Djibouti, Sudan, and Somalia. These countries' principal exports are unsorted fresh fruits and vegetables. Higher grade fresh products, including sorted and pre-packaged items, are sent to the United Arab Emirates, the United Kingdom, and the Netherlands, on the other hand. It should be emphasised that Djibouti receives over 85% of all fruit and vegetable exports, with the Emirates coming in second. Citrus fruits, bananas, and mangoes were the most common export products (EHDA, 2011).

Ethiopia's production conditions favor the cultivation of various varieties of fruits and vegetables due to the country's suitability in various altitude ranges with additional irrigation potentials in the country's different regions to produce all temperate, sub-tropical, and tropical fruits and vegetables (EHDA, 2011). In this sense, the country has a significant potential for producing high-value export products such as fruits and vegetables that can compete in the global market. Furthermore, numerous studies have demonstrated that the country's sufficient space for

cultivation and labor throughout the year enable it to produce a wide range of fruits and vegetables (Degafe T, 2013).

2.1.4 Determinants of Fruit and Vegetable Export Performance

Numerous researchers divided the factors that affect export performance into internal and external factors. Resources within the company are internal determinants, whilst forces outside the company are external determinants (F. Lages, C. Sousa, 2010). External determinants are corporate-external resources, while internal determinants are resources from within the company. The resource-based view (RBV) asserts that an organization has a certain set of intangible and tangible resources (leadership qualities, assets, skills, procedures, knowledge, and information) that are within the management's control (J.Barney, 1991).

In the internal environment, management teams have a significant impact on export performance, according to the literature on export marketing. The internal or institutional factors influencing export performance include firm size, company age, export commitment, international experience, management perception, export product characteristics, and export marketing mix techniques (Sousa, 2010). These technologies give the company's management the ability to create and carry out strategies to improve the organization's effectiveness and efficiency during export operations (Kamasa, 2017).

Some of the main challenges experienced in vegetable and fruit production in Ethiopia include poor pre- and post-harvest handling, severe output seasonality, a lack of storage, insect and disease prevalence and seasonal price variations. The classification of Tesfom and Lutz (2006) will be used in this study to further analyse the applicability of the challenges in vegetable and fruit export marketing.

2.1.4.1 Internal Problems

According to Leonidou (2004), internal obstacles or obstruction include: limitations relating to organizational resources/capabilities and the company's attitude toward export trade. These concerns are categorized as being closely connected to the organization's controllable problems. Tesfom and Lutz (2006) further classified internal barriers as corporate barriers and product barriers.

a. Company Barriers

According to Porter (1985), referenced in Tesfom and Lutz (2006), company restrictions have an impact on both the choice of marketing strategy and the feasibility of putting that plan into action. A company's core assets and competencies are what give it a competitive edge. The three sorts of business obstacles are lack of financial resources, lack of people resources, and lack of marketing knowledge and information. Lack of knowledge about foreign markets, business strategy, and competition, as well as a lack of management to generate foreign sales, are the root causes of marketing knowledge and information problems. A major obstacle to developing-country export is believed to be a lack of awareness about global prospects and lucrative markets (OCass and Julian 2003).

Many export enterprises in developing countries are unable to operate due to a lack of sufficient working capital, putting the entire production process at risk and incurring additional expenditures. The absence of qualified and experienced human resources can be linked to a significant part to knowledge challenges in export marketing. A company that includes the demands of international operations into its human resource management, particularly for executives and professionals, is more likely to succeed in its export initiatives (Kambe, 2018).

b. Product Barriers

Product issues are related to the quality and technical requirements of the export market's target sector, such as: B. the export product's design, style, quality packaging and labelling requirements, and product customization or modification. Quality obstacles, according to Cook (1983), are connected to packing, achieving importers' quality criteria, and generating a proper design and image for export markets. In poor countries, quality standards differ. As a result, in order for any exporting company to compete in the market, compliance with these requirements is required (Gnangnon, 2021).

Additionally, Bharti (2014) identified the following barriers to the quality of exports of perishable goods from impoverished countries: the viability of the cold chain, obsolete and inadequately maintained facilities, and a lack of awareness of and demand for cold chain services. The cold chain is essential for maintaining the quality of perishable goods like fruit and vegetables.

2.1.4.2 External Barriers

External barriers are those that are anchored in the external environment and over the repercussions of which the firm has no control. These issues are sometimes known as macro environmental barriers or industrial barriers. External barriers were further defined by Tesfom and Lutz (2006) as "industry barriers," "market barriers," and "macro environmental barriers."

a. Domestic Export Industry Barrier

It belongs to the first group of external problems. The level of exporting activity and the types of export marketing strategies vary widely between industries. Tesfom and Lutz (2006) cite Porter (1985) and Kerin et al. (1990) who claim that the difference among industries is due to the various characteristics of industries. Different market systems, firm sizes, and the existence of foreign competitors across markets must all be taken into account when developing an efficient export marketing strategy.

Firm size and economies of scale, a lack of new technology, being unprepared to compete with large MNCs, and unreliable raw material supplies are a few examples of industrial hurdles. The size of the company is a key determinant of its propensity to export. The size advantage of a larger firm over a smaller one typically has a positive effect on export activity. The accessibility of raw materials and inputs is another crucial factor for businesses exporting from underdeveloped countries. Whether coming from domestic or foreign sources, their supply is unreliable (Liargovas, P.G., and Skandalis, K.S., 2008).

Another type of industrial obstacle is competitive barriers. When competitors in the market have the same information, competition should not be regarded as an impediment. However, in reality, obtaining data on export potential is expensive and challenging. Because of this, the company is

less motivated to concentrate on export and compete with other exporters throughout the world (Tasfom and Lutz, 2006).

b. Foreign Export Market Barriers

According to Tesfom, G., and Lutz, C. (2006), export market barriers are "factors that affect the export marketing strategy related to customer barriers and procedural barriers." The consumer's perception of the attributes of the product is what creates customer barriers. An important factor to keep in mind is that, in addition to specific quality concerns, exporters from developing countries must deal with a poor perception of their country. Additionally, there are significant challenges with client preferences related to poor product image in the global market, insufficient overseas demand, linguistic and cultural obstacles, and country of origin influence.

The export market is constrained by procedural obstacles. Understanding export procedures is necessary for exporting. To comply with domestic and international market laws, a lot of time and documentation is required. Private organizations like banks, shipping corporations, and insurance companies have their own protocols in addition to the government. For new managers in particular, a lack of understanding of export procedures can make managing overseas paperwork and documentation quite challenging. Also affecting the exporting procedure are payment delays, the intricacy of the paperwork's procedural requirements, and delays in duty disadvantages (Kuppusamy, J., and Anantharaman, R.N., 2014).

c. Institutional Support Related Barriers

Institutional support is a crucial factor that affects the export performance of firms, particularly born global. The quality of institutional support, including financial and marketing support, can significantly impact the export-oriented firms' performance. Financial and marketing support from institutions can significantly improve the performance of such firms (Joseph, 2013). The quality of institutional support is also an important determinant of the export performance of new firms. However, there is a growing body of literature that highlights the barriers faced by firms due to inadequate institutional support, which hinders their export performance. These barriers include complex regulations, lack of access to finance, inadequate marketing support, and limited access to technology and skilled labor. Therefore, it is essential to identify and address these barriers to enhance the export potential of firms (Mário, et.al, 2021).

d. Government Policy and Regulation

Lack of institutional support, such as government policy and regulation, might hinder a company's ability to export. Complex regulations, lack of access to finance, inadequate marketing support, and limited access to technology and skilled labor are some of the barriers faced by firms due to inadequate institutional support. However, government institutional support can significantly improve the export performance of small and medium-sized enterprises (SMEs) (Scott, et.al, 2014). The quality of institutional support is especially important for new and small firms that face more liabilities. Government support in promoting the internationalization of SMEs and enhancing their competitiveness is crucial. The impact of government policy and regulations on export performance can be moderated by firms' active and reactive internationalization strategies (Eurico, et.al, 2021).

2.2 Empirical Review

The outcome of an empirical literature review of works by various scholars and researchers addressing the concepts related to factors affecting export performance of fruit and vegetables, are summarized in Table 2.1 below.

Table 2.1 Reviewed Literatures

Author (s)	Title of the Study	Finding of the Study
Sisay (2014)	Assessing the Challenges in Export Marketing: The Case of Ethiopian Vegetable and Fruit Growers	The barriers of fruit and vegetable export performance include: management commitment issue; problem of technical progress; financially; lack of accessible transportation system; low stakeholder awareness; seasonality of Ethiopian supply; lack of charge; lack of infrastructure; government bureaucracy; lack of potential markets; and lack of inputs were identified as problems for vegetable and fruit export.
Degafe T.	Fruit and Vegetable Export performance of Ethiopia	The main limitations faced by Ethiopian fruit and vegetable exporters include: Most rural smallholders lack credit facilities

(2013),		and supplies of inputs, which further affects their production volume and quality, lack of organized information in the market system, production quality is low and post-harvest services are poorly managed.
Sager, H. 2014	International Marketing in India: Prospects and Challenges	Little marketing training presence is associated with foreign products and low demand for non-essential products, high manufacturing costs, and insufficient infrastructure are all connected with presence. Little room for competition, heavy government meddling and regulation, political instability, and civil unrest. There are chances for improvement in the near future because most emerging countries are experiencing high population increase, attractive government incentives and rising prosperity are only a few.
UNCTAD (2004)	Export Performance and Its Determinants: Supply & Demand Constraints	Both internal and external factors make up the determinants. Trade barriers and competitiveness in foreign markets are external factors that are connected to market access conditions and other factors impacting import demand. Internal factors relate to supply-side conditions, including access to raw materials and other resources. It also depends on factor costs such as labor and capital, as well as resource endowments and access to technology.
Tesfom, G. & Lutz, C. (2006)	A classification of the export marketing problems of medium-sized manufacturing companies in developing countries	Companies obstacles, product barriers, industry barriers, export market barriers, and macro-environmental barriers are the categories of export problems.
Yeabsira, T, (2014)	Assessment of Fruit and Vegetable Export Performance in Ethiopia	The result shows low investors on the field, limited number of human resources, high exporting risk, lack of organized information in the market, lack of modern farming

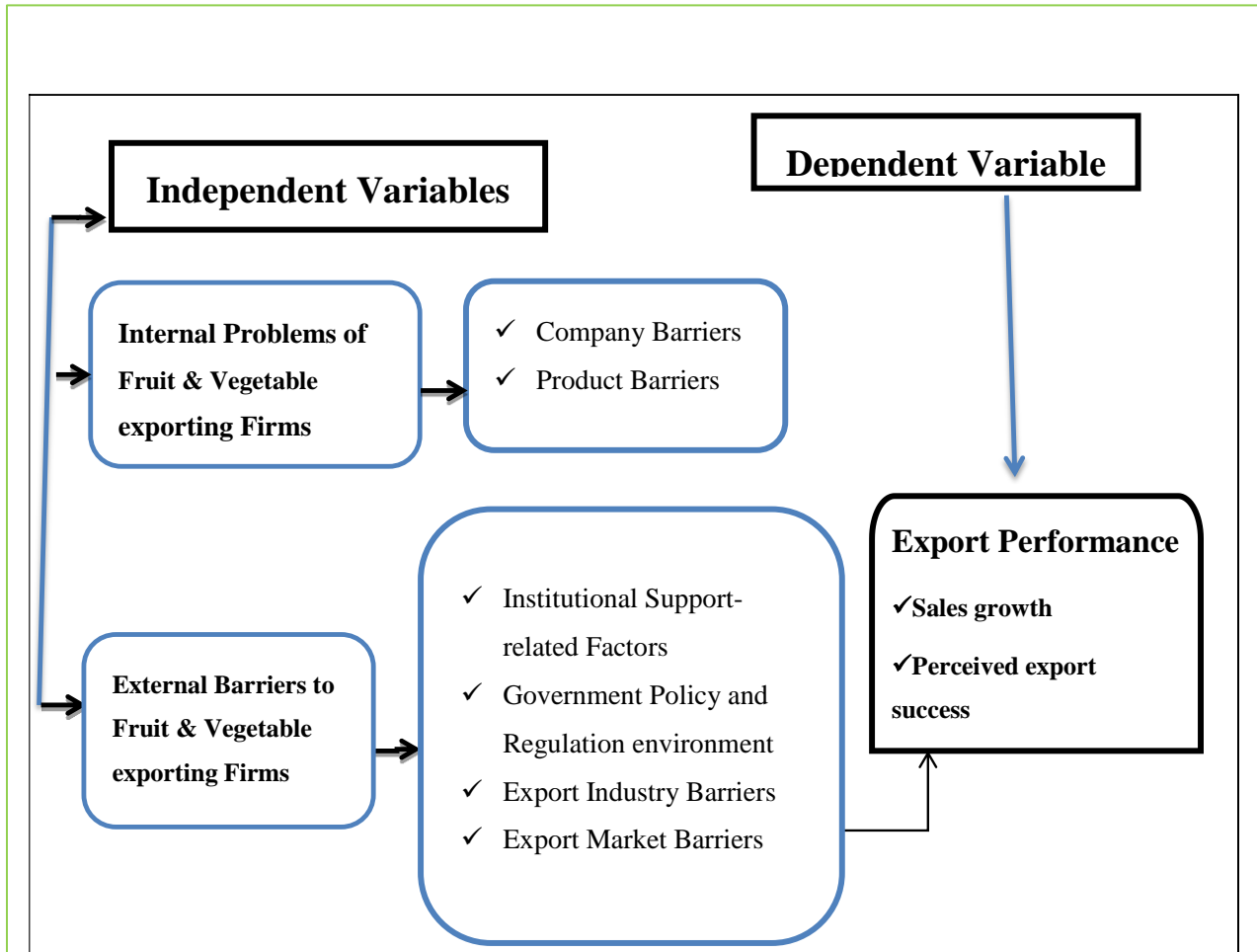
		technologies, lack of knowledge and information, lack of managerial skill, lack of employee commitment and lack of credit facilities
Tesfom, G., Lutz, C. & Ghauri, P. (2004)	Comparing export marketing channels: developed versus developing countries; Uganda, Netherlands, & Eritrea	Lack of knowledge to locate foreign market opportunities, lack of specific information about agents and distributors, lack of experience in planning and executing exports, inadequate self-financing of exports, lack of export market research and knowledge, lack of management exposure to various cultures and business systems, lack of people trained and certified in export marketing.
Bozkurt, O. & Esen, S. (2014)	The Impact of Exporter Small-Business Enterprise Factors on their own Export Performance and Costs	Bottlenecks include a lack of information about foreign connections and markets, complicated export procedures, and uncertainty when entering new markets.
Diriba (2021)	Competitiveness and determinants of coffee export in Ethiopia.	The analysis showed that the size of domestic coffee production, the world market price and the real exchange rate have a positive and significant impact on total coffee exports in the long term. Yet, there are negative and severe effects of foreign direct investment, price linkages, and world coffee output. In the short term, Ethiopia's total coffee export is defined as a positive substantial function of domestic coffee output and a real exchange rate, a positive but irrelevant effect with RCA level and world price, and a negative function of FDI, price ratio and world production of coffee.

Jima (2020)	Review on Coffee Production and Marketing in Ethiopia	Lack of competitiveness, lack of infrastructure, inadequate service access, and little value addition, in adequate research and technology transfer, and rainfall variability are among major constraints of coffee production in Ethiopia. Price volatility, Poor accesses to market, little market promotion and incentive mechanism, and low price were reported to be the major problem of coffee export in Ethiopia.
World Bank (2004)	An overview of manufacturing activities with growth potential for high value exports in Ethiopia: market structure, costs, constraints, competition and opportunities	High freight costs and limited cargo space, a lack of a rail transportation system, subpar airport facilities, the presence of illegal traders, subpar packaging systems, a shortage of skilled laborers, inadequate pre- and post-harvest infrastructure facilities, access to bank credit, and a lack of a detailed supply market survey are the main constraints for high-value Ethiopian export products.

2.3 Conceptual Framework

According to Bogdan and Biklen (2003), a conceptual framework is a framework composed of specific abstract building blocks that represent the analytical/synthetic, observational, and experimental parts of a process or system to be developed. In order to evaluate the empirical relationship between export determinants and export performance, a conceptual research model, depicted in Fig. 2.1, was proposed in this study based on the theoretical and empirical studies presented in the literature.

Figure 2.1 Conceptual Framework of the research



Source: Adapted from Tesfom and Lutz (2006)

2.4 Hypothesis

The following critical variables were expected to be tested for their impact and magnitude on Ethiopia's fruit and vegetable export performance throughout the study.

H1. Barriers inside the exporting company have a negative and significant effect on fruit and vegetable export performance.

H2. Product related barriers have a negative and significant effect on fruit and vegetable export performance.

H3. Institutional support related barriers have a negative and significant effect on fruit and vegetable export performance.

H4. Government rule and regulation related barriers have a negative and significant effect on fruit and vegetable export performance.

H5. Domestic export market industry barriers have a negative and significant effect on fruit and vegetable export performance.

H6. Foreign market industry barriers have a negative and significant effect on fruit and vegetable export performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology used by the researcher to carry out the study and get the answers to the research questions provided in the first chapter is described in this chapter. It includes: a description of the study area, research approach, research design, target group and sample design, data sources, data collection techniques, data analysis techniques, validity and reliability, and ethical considerations for the study.

3.2 Description of the Study Area

Ethiopia has a long tradition of producing fruits like banana, pineapple, mango, etc. and vegetables like green beans, snow peas, tomato, paprika, table grapes and others for home consumption and export to neighboring countries (EHPEA, 2022).

Because most fruit and vegetable exporters have offices in Addis Ababa, the country's capital city, this study, which intends to evaluate the factors affecting the export performance of fruits and vegetables, was carried out there. In addition to being serves as an important administrative hub for Ethiopia, Addis Ababa is also the center of Africa. This study focuses on the internal and external obstacles that fruit and vegetable exporters have when supplying products to the world market.

3.3 Research Approach

The three research approaches are qualitative, quantitative, and mixed, according to Creswell (2008). A qualitative research approach is a technique to exploring and understanding the importance that individuals or groups attach to a social or human issue. The research process includes new questions and procedures as well as data typically collected from the communities of participants.

The study is classified as quantitative if you aim to quantify the variation in a phenomenon, scenario, problem, or issue; if information is acquired primarily using quantitative variables; and if the analysis is intended to determine the scale of the variation.

In contrast, mixed methods research is a style of inquiry that involves gathering both quantitative and qualitative data, fusing the two types of data, and employing various designs that may include philosophical assumption and theoretical frameworks. The fundamental assumption of this type of study is that combining qualitative and quantitative methods results in a more thorough comprehension of a research subject.

A mixed research approach was employed to attain the study's goal, integrating qualitative and quantitative approaches to offer a more complete understanding of a research problem. In order to comprehend the nature of the problem and evaluate the significance of the data, a qualitative technique was employed to collect data. Additionally, a quantitative approach was utilized to gather the data using quantitative measures, investigate the relationship between the dependent and independent variables, and perform statistical analysis on the data.

3.4 Research Design

Based on the research purpose, the most common known research designs are descriptive, exploratory, and explanatory. The goal of descriptive research is to describe and interpret what is, and it aims to describe the current state of affairs. On the other hand, explanatory research aims to establish the cause-effect relationship between variables. The researcher uses the facts or information already available to analyze and critically evaluate the data/information. Exploratory research is less formal, sometimes even unstructured, and focuses on extracting background information and helping to better understand and clarify a problem. It can be used to develop hypotheses and develop questions to be answered. A descriptive study explores and describes how things are. It is also about assessing attitudes, opinions, performance, demographics, practices and procedures (Kothari, 1990).

As a result, this study used both descriptive and explanatory research designs. Ethiopia's fruit and vegetables export performance has been described along with the types of conditions that exist using the descriptive study design. The explanation, analysis, and measurement of the

variables influencing Ethiopia's fruit and vegetables export performance were done using an explanatory research design.

3.5 Target Population and Sampling

3.5.1 Target Population

Population refers to all the members of a real or hypothetical set of people, events or objects to which we wish to generalize the results of our research. The target population of this study was the active exporters of Ethiopian fruit and vegetables to the rest of the world.

3.5.2 Sampling Technique

The non-probability sampling, purposive or judgmental sampling technique is employed in this study. Purposive sampling is valued for being simple to use, saving time, and allowing for the selection of people who are most relevant to the research question. The technique involves selecting participants based on a specific purpose or criterion, rather than randomly selecting them from the population. In this case, purposive sampling is used in order to select the participants based on their expertise, knowledge and experience in the industry, which can provide valuable insights into the determinants of export performance. Accordingly, the general managers, marketing managers, export managers and the experts in fruit and vegetable export industry of Ethiopia were selected to investigate the factors affecting fruit and vegetable export in the country.

3.5.3 Sample Size

The number of active exporters of the sector differs from year to year. This study therefore considers those firms that have actively exported fruits and vegetables during the fiscal year of 2021/22 G.C. According to the National Bank of Ethiopia data, during the FY of 2021/22, 206 exporters of fruit and vegetable were active. Considering the total study population, the study sample size was determined using the Ashish-Kumar formula. As stated by Kumar for a 95% confidence level and p (margin of error) = 0.5, the sample size would be:

$$n = \frac{Z^2 \cdot p \cdot q \cdot N}{e^2(N-1) + Z^2 p \cdot q}$$

Where:

n: sample size

N: number of total populations

Z: value of confidence level from Z-table

e: precise (error) margin of error

P: proportion of sample in the universe

Therefore,

$$n = \frac{1.96^2 \times 0.5 \times 0.5 \times 206}{(0.05)^2(206 - 1) + (1.96)^2 \times 0.5 \times 0.5}$$

$$\mathbf{n=135}$$

As a result, 135 active exporters of fruits and vegetables were chosen as a sample for the study, and the answer from 124 of those exporters was valid and used in the analysis of the results.

3.6 Method of Data Collection

The researcher used a questionnaire, the primary data collection technique, to gather the desired data for this investigation. Primary data were gathered by the researcher using survey questionnaires and were organized using a five-point Likert scale for a number of variables. The questionnaire was a semi-structured questionnaire that included both open-ended and closed-ended questions, as well as targeted sampling methods. To this end, those who were at managerial level: CEOs, Marketing Managers, and Export Managers and Export Experts are among the most targeted respondents who adequately completed the questionnaire.

3.7 Data Source

Both primary and secondary data sources were employed to gather enough accurate data to answer the research questions and reach the research objective. Questionnaires were used to gather the primary data. In addition to the primary data source, data were gathered from a variety of websites, including those of the World Bank, International Monetary Fund, National Bank of Ethiopia, National Planning Commission, and Ministry of Trade, The Ministry of Agriculture, the Ethiopian Customs Service, the Ethiopian Chamber of Commerce, the Ethiopian Investment Agency and various published and unpublished materials, articles and investigations related to the study area were used as secondary data sources.

3.8 Method of Data Analysis

Descriptive and inferential statistics were used to examine the information gathered from the respondents using the questionnaire in order to get to relevant facts and conclusions. The key factors influencing Ethiopia's fruit and vegetable export performance were described using descriptive statistical analysis. The relationship between the independent and the dependent variable was statistically analyzed by means of regression and correlation analysis.

3.9 Ethical Considerations

In research, ethical considerations refer to the moral principles and values that researchers must adhere to in order to maintain the dignity, rights, and well-being of participants. Creswell (2007) suggests three primary ethical considerations during research: informed consent, confidentiality, and protection from harm. As a result, the required safety measures were implemented to ensure the study's ethics. The aim of the data being submitted was explained to respondents in advance. The participants were told of the study's relevance and goal, and their informed consent was obtained. Participants were not obliged to write or provide their names so order to maintain confidentiality. Additionally, participants received guarantees that the data they provided on the questionnaire would only be used for the study.

3.10 Reliability and Validity

A questionnaire's validity seeks to determine if it captures the information it sets out to capture. According to Fields (2005), an appropriate questionnaire effectively achieves the desired goal. The four main categories of validity are construct, criteria, face, and content validity. As indicated in the literature corpus, eminent scholars have been cited in this regard. The corresponding literature study in chapter 2 gives detailed recommendations for the creation of the conceptual framework. The validity test mainly focused on content validity. The degree to which elements in an instrument reflect the content universe to which the instrument would be generalized is the most commonly proposed type of modality for checking instrument validity (Straub, Boudreau et al. 2004).

Construct and criteria validity tests are the additional validity check. Cause-effect relationships are discussed in the questions by Straub et al. manufactured. (2004). All potential outcomes were matched with the help of industry document analysis and the support of the above industry specialists. The Cronbach alpha coefficient is another method of assessing an instrument's repeatability or reliability. It is regarded as the most suitable reliability indicator when employing Likert scales (Whitley, 2002; Robinson, 2009). It makes reasonable to start with their reported Cronbach alpha coefficient since the questionnaire used in this study was substantially adapted from previously published research. A value of 0.728 was recorded as the consistency estimate.

3.1 Reliability Statistics					
Case Processing Summary	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Cases Valid	124	100%	.728	.768	39
Excluded	0	0			
Total	124	100%			

Source: Survey Result, 2023

CHAPTER FOUR

Data Analysis, Interpretation and Discussion of Results

4.1 Introduction

This chapter deals with the empirical analysis, interpretation and discussion of the findings based on the data collected from the respondents to the study. This chapter consists mainly of two sections, descriptive and inferential statistics. The first section covers; the descriptive statistics of the survey result and the second section contains the inferential statistical result of the study, which includes correlation analysis, assumptions of regression analysis, results of multiple regression analysis, and hypothesis tests and result of qualitative data.

4.2 Data Cleaning

Examining the factors that impact Ethiopia's performance in exporting fruits and vegetables is the primary goal of this study, as it is mentioned directly in the first chapter. The core data were gathered utilizing a questionnaire created using a Likert scale in order to reach a relevant fact and conclusion. Accordingly, 135 fruit and vegetable exporters in Addis Ababa were selected as a sample for the study and invited to answer the questionnaires. Of the 135 questionnaires distributed, 127 were returned and 3 were discarded because they were incomplete. Babbie (1990) assumes that a response rate of 50% is sufficient, 60% is good, and 70% or more is very good. Thus, according to Babbie, the response rate in this study was very good. In order to conduct a quantitative analysis and discussion, 124 questionnaires were used. As a result, the study response rate was 91.85% and table 4.1 below provides a summary.

Table 4.1 Data Cleaning

Questionnaires Distributed	Questionnaires Returned	Questionnaires Not returned	Questionnaires Rejected	Workable Questionnaire	Response Rate
135	127	8	3	124	91.85%

Source: Survey Result, 2023

4.3 Demographic Profile of Respondents

In order to identify themselves in a way that was relevant to the subject being studied, respondents were asked for background information. The findings on the respondents' demographics, including their level of education and job status when they were chosen as a sample for the study, are presented in this part.

As can be seen in Table 4.2 below, university graduates make up almost 51.6% of the respondents who were in charge of all export-related operations at the chosen organizations. With 35.5% and 9.7% respectively, master's and diploma graduates come in second and third. According to the respondents' educational backgrounds, the vast majority of them are highly educated, capable of understanding the questions and connecting their company's export success to the factors influencing it.

The respondents were also questioned regarding their professional status within the individual companies, and they provided the following information. 30.6%, 25.8%, 24.2%, 16.1%, and 3.2% of the 124 respondents who took part in the survey identified themselves as an export manager, general manager, marketing manager, export expert, or another member of the export department, respectively. The findings indicate that export managers and general managers make up the bulk of respondents (56.4% of all respondents). This means that the vast majority of respondents are undoubtedly professionals with expertise, the ability to fully comprehend the queries, and the ability to relate the export performance of their firm to the performance-influencing factors.

Table 4.2 Demographic Profile of Respondents

Variables	Classification of variable	Frequency	Percent
Educational Level of Respondents	Diploma	12	9.7
	First Degree	64	51.6
	Master's Degree	44	35.5
	Above Masters	4	3.2
	Total	124	100.0
Position in the Company	Export Expert	20	16.2

	Export Manager	38	30.6
	Marketing Manager	30	24.2
	General Manager	32	25.8
	Other	4	3.2
	Total	124	100

Source: Survey Result, 2023

4.4 General Information of the Firm

In addition to the respondents' demographic information, questions about the experience of the fruit and vegetable export industry, their legal structure, and their export destination were also included in the survey. The study's findings are detailed in Table 4.3 below.

Table 4.3 General Information of the Firm

Variable	Classification of variable	Frequency	Percent
Number of Years the company stayed in the fruit and vegetable	Under 5 Years	34	27.4
	Between 6-10 Years	36	29
	Between 11-15 Years	34	27.4
	Between 16-20 Years	16	12.9
	Above 21	4	3.2
	Total	124	100.0
Export Business Legal formation of the Firm	Sole Proprietorship	26	21.0
	Joint-Venture	14	11.3
	Cooperative Union	2	1.6
	Share Company	4	3.2
	Private Limited Company	78	62.9
	Total	124	100
Export Destination of the Firm in a number of countries	Between 1-5 Countries	38	30.6
	Between 6-10 Countries	40	32.3
	Between 11-15 Countries	30	24.2
	More than 16 countries	16	12.9

	Total	124	100.0
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Source: Survey Result, 2023

As shown in Table 4.3 above, the results of the survey show that 34 or 27.4% of all companies selected for the survey were engaged in fruit and vegetable export business less than 5 years ago. In addition, 36 or 29%, 34 or 27.4%, 16 or 12.9%, 4 or 3.3% of the total companies were between 6 and 10 years, between 11 and 15 years, between 16 and 20 years in fruit and vegetable export business and over 21 years respectively. Thus, the majority of the 56.4% of the companies remained in business for less than 10 years, which is very young compared to when business started in Ethiopia. Due to the current market participation of companies, they appear to be struggling with a variety of issues, primarily related to their age, size, experience and market access, which are the main causes of their vulnerability to supply requirements

As well as, the legal formation of the firms is reviewed as follows: 78 companies, or 62.9% of the overall sample size, were private limited companies out of companies included in the survey, additionally, the survey's findings indicate that, of the 124 companies, 11.3%, 1.6%, 3.2%, and 21% are formed as Joint-Venture, Cooperative Union, Share Company and Sole Proprietorship respectively. In general, Businesses' legal structure, which affects a range of factors including their ability to easily access financing, enter into contracts, manage risk, and manage taxes, can have an impact on their ability to compete in international markets and their ability to export their goods.

Additionally evaluated were the companies' exporting destinations. As a result, the survey's findings indicate that 38, or 30.6%, of the enterprises export to one to five countries. The others, 40 or 32.3% exports from 6 to 10 countries, 30 or 24.2% exports to from 11 to 15 countries, and 16 or 12.9% exports to more than 16 countries. Thus, the result demonstrates that more than 60% of the firms' export destinations are less than ten countries, which has a minor negative impact on the firms' ability to reach the global market.

4.5 Determinants of Fruit and Vegetable Export Performance in Ethiopia

In order to evaluate the factors influencing the export performance of fruits and vegetables in Ethiopia, the researcher divided the components into internal and external barriers during the

survey. As a result, there are four groups of external barriers: those related to institutional support, those related to government policy and regulation, those related to domestic export industries, and those related to international export markets. Company barriers and product barriers are the two categories of internal barriers.

Under this study, from items discussed under external barriers the domestic export industries challenges are concerned with barriers belong to domestic market competition and consumption, lack of technology adoption, poor access to foreign market and supply side constraints. As well as barriers belong to foreign export barriers are related to barriers on side of the importers such as price volatility, cultural and linguistic difference, payment delay and export paperwork's. In addition, barriers inside the exporting company comprises barriers related to lack of knowledge and information, lack of management commitment, lack of finance, lack of qualified human resource. Also, export product related barriers incorporated are impact due to low value addition, perishability challenges, poor quality control, and inadequate package and labeling.

Table 4.4 Mean and standard Deviation of Variables

No	Variables of the Study	N	Mean	Standard Deviation
Total Average of Barriers		124	3.30	1.09
I	Internal Problems	124	3.61	1.11
1	Barriers inside the exporting company	124	3.18	1.15
2	Product related Barriers	124	4.03	1.07
II	External Problems	124	3.92	0.91
1	The Institutional Support related barriers	124	3.83	0.89
2	Government Policy and Regulation related barriers	124	3.98	0.94
3	The Domestic Export Industry Barriers	124	3.90	0.93
4	Foreign Export Market Barriers	124	3.95	0.88
III	Export Performance	124	4.65	1.05

Source: Survey Result, 2023

To show the degree of respondents' agreement, descriptive statistics of the data, including the mean and standard deviation, have been presented and analyzed in this portion of the report. On a five-point Likert scale, where 1 is Strongly Disagree, 2 is Disagree, 3 is Neutral, 4 is Agree, and 5 is Strongly Agree, respondents' response rates were calculated. The mean and standard deviation of the variables under investigation are summarized in Table 4.4 above. The barriers within the exporting company were rated with a mean of 3.18 and a standard deviation of 1.15, as can be seen in Table 4.4 above, demonstrating that the respondents partially agree on the impact of company barriers on influencing fruit and vegetable export performance of companies. Product-Related Barriers, with a mean of 4.03 and a standard deviation of 1.05, was the second internal problem variable. This indicates that the majority of respondents agree that the variables have an impact on the product's export performance. Overall, the mean and standard deviation of internal challenges, which are 3.61 and 1.11, respectively, suggest that the majority of respondents still agree on the influence of the variable.

The second parts of the variables examined are the external issues, which are described as follows. The mean and standard deviation of the institutional support barriers are 3.83 and 0.89, showing that respondents agreed on the impact of the variable on fruit and vegetable export performance. Regarding the government policy and regulatory barriers, the mean of the respondents was 3.98 and the standard deviation was 0.94, showing that respondents agree on the factor. Regarding the obstacles faced by the domestic export industry, the respondents' answer is: "Agree", which means that the mean is 3.90 and the standard deviation is 0.93. Subsequently, respondents' response to the impact of foreign export market barriers averaged 3.95 and standard deviation 0.88, meaning that the majority of them agreed with the variables affecting fruit and vegetable export performance in Ethiopia.

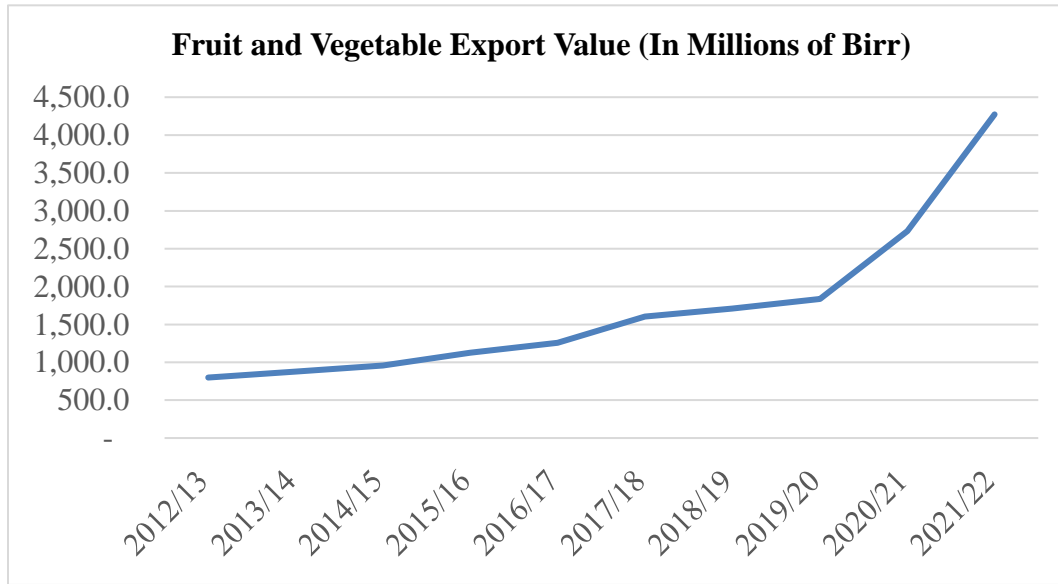
Overall, according to the respondents' response, the mean of the external issues is 3.92 and the standard deviation is 0.91, showing that they agreed on determining the factors affecting fruit and vegetable export performance in Ethiopia.

4.6 Trend Analysis of Fruit and Vegetable Export in Ethiopia

This section deals with the export sales status of Ethiopian fruit and vegetable which are available and recorded in the National Bank of Ethiopia document from the year 2012/2013-2021/2022 GC.

Value of Major Exports (In Millions of Birr)										
Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Value	798.8	877.2	956.6	1,128.1	1,257.7	1,603.5	1,709.5	1,834.8	2,731.0	4,272.8

Figure 4.1 Export Sales Revenue Trends of Fruit and Vegetable Exporters

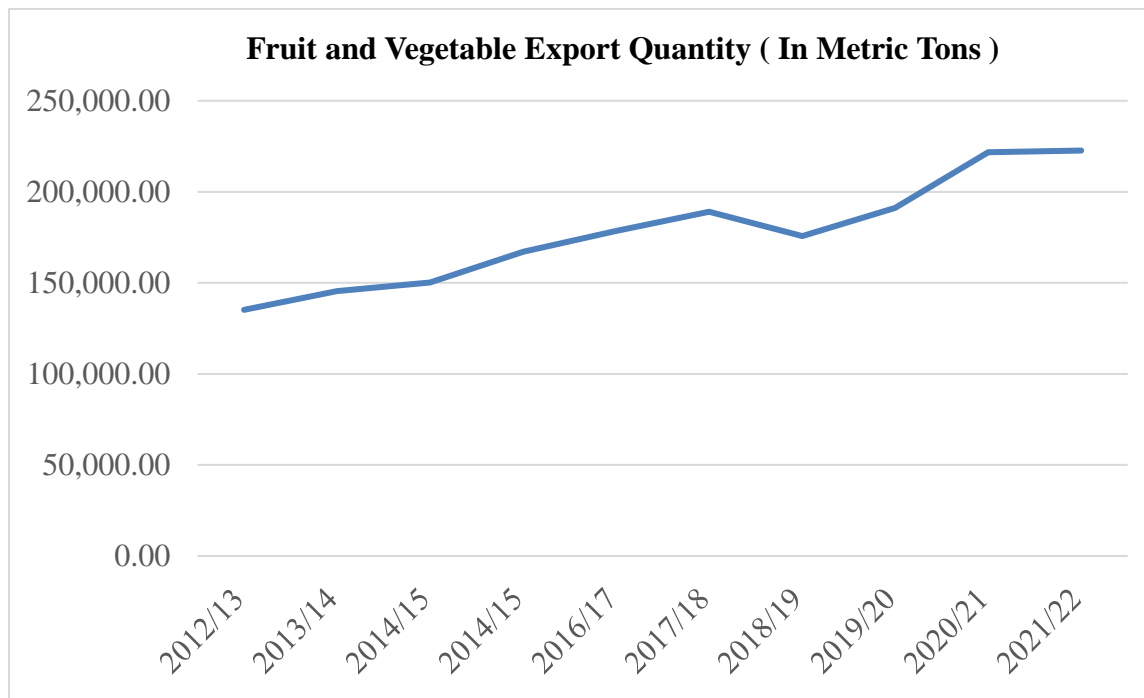


Source: NBE Annual Report (2022)

Quantity of Major Exports (In Metric Tons)										
Year										

	2012/13	2013/14	2014/15	2014/15	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Quantity	135,184 .35	145,436 .23	150,148 .72	167,076 .37	178,569 .19	188,976 .92	175,619 .64	191,183 .11	221,695 .57	222,650 .42

Figure 4.2 Export Sales Quantity Trend of Fruit and Vegetable Exporters



Source: NBE Annual Report (2022)

Figure 4.1 and 4.2 showed the export sales trend for the years 2012/2013 through 2021/22 G.C. in terms of the value of major exports in thousands of Ethiopian Birr and in terms of quantity of major exports in metric tons. For the year 2013/14, export values and quantity increased significantly by 8.93% & 7.05%, respectively, in comparison to the sales figures of 2012/13. Furthermore, the value and quantity of fruit and vegetable sales in 2014/15 increased noticeably by 8.30% and 3.14%, respectively. Next, the value and quantity of fruit and vegetable sales in 2015/16 are noticeably higher than those in 2014/15 by 15.20% and 10.13%, respectively.

Also, the value and quantity of fruit and vegetable sales in 2016/17 increased significantly from 2015/2016 by 10.31% and 6.44%, respectively. As well, the value and quantity of fruit and vegetable sales in 2017/18 increased dramatically from the previous year by 21.56% and 5.51%, respectively. However, the value of fruit and vegetable sales increased by 6.20% in 2018–19, but the quantity showed negative growth of 7.61%, which was unfavorable.

On the other hand, the value and quantity of fruit and vegetable sales increased somewhat from the previous year of 2018/19 in 2019/20, by 6.83% and 8.14%, respectively. In addition, the value and quantity of fruit and vegetable sales increased dramatically from the previous year, 2019/20, by 32.82% and 13.76%, respectively, in 2020/21. However, the value of fruit and vegetable sales in 2021/22 greatly rises while remaining unchanged in terms of quantity from 2020/21 by 36.08% and 0.43%, respectively.

4.7 Inferential Analysis

Inferential analysis is about testing hypotheses and making predictions about a population based on a sample of data. Significance tests such as t-tests and ANOVA are commonly used in inferential analysis to determine whether there is a statistically significant difference between groups or variables. In addition, Pearson correlation and multiple linear regressions are statistical tools used in inferential analysis to analyze the relationship between independent and dependent variables and to make predictions (Kothari, 2004).

4.7.1 Pearson Correlation Analysis

Pearson correlation analysis is a statistical method used to measure the strength and direction of the linear relationship between two variables. It is often used in research to examine the association between various factors and to analyze the relationships between variables. According to the Pearson correlation coefficient (r) ranges from -1 to +1, where -1 represents a perfect negative correlation, +1 represents a perfect positive correlation, and 0 indicates no correlation between the two variables. The closer the coefficient is to -1 or +1, the stronger the correlation is between the variables.

Table 4.5 Pearson Correlation Analysis

Correlations								
		Company Problems	Product Barriers	Institutional Support	Policy and Regulation	Domestic Market	Foreign Market	Export Performance
Company Problems	Pearson Correlation	1						
	Sig. (2-tailed)							
Product Barriers	Pearson Correlation	.070	1					
	Sig. (2-tailed)	.440						
Institutional Support	Pearson Correlation	.220*	.368**	1				
	Sig. (2-tailed)	.014	.000					
Policy and Regulation	Pearson Correlation	.130	.257**	.465**	1			
	Sig. (2-tailed)	.149	.004	.000				
Domestic Market	Pearson Correlation	.235**	.325**	.538**	.583**	1		
	Sig. (2-tailed)	.009	.000	.000	.000			
Foreign Market	Pearson Correlation	.128	.327**	.388**	.325**	.137	1	
	Sig. (2-tailed)	.155	.000	.000	.000	.129		
Export Performance	Pearson Correlation	.146	.188*	.570**	.332**	.257**	.747**	1
	Sig. (2-tailed)	.106	.037	.000	.000	.004	.000	
	N	124	124	124	124	124	124	124
*. Correlation is significant at the 0.05 level (2-tailed).								
**. Correlation is significant at the 0.01 level (2-tailed).								

Source: Survey Result, 2023

As indicated above table 4.5, the result of Pearson correlation analysis shows that, the foreign market barrier has a very strong and positive correlation with the export performance of firms with $r=.747$, $p<.05$. The other variable, institutional support related barriers with $r=.570$, $p<.05$ have also a significant and positive correlation with the export performance. In addition, government policy and regulation related barriers with $r=.332$, $p<.05$ and the Domestic Export Industry Barriers with $r=.257$, $p<.05$ have moderate and positive correlation with the export

performance. On the other hand, the correlation coefficient of the product related barriers with $r=.188$, $p<.05$ and company problems is $r= .146$, $p>.05$, which indicates that there is a weak but, a positive correlation with the export performance of the firms under consideration.

4.7.2 Regression Analysis

Regression analysis is a statistical technique used to study and quantify the relationship between one or more independent variables and a dependent variable. It is used to determine the degree or intensity to which the dependent variable can be explained by the independent variables. The most commonly used type of regression analysis is linear regression, which involves fitting a straight line to the data (Field, 2009).

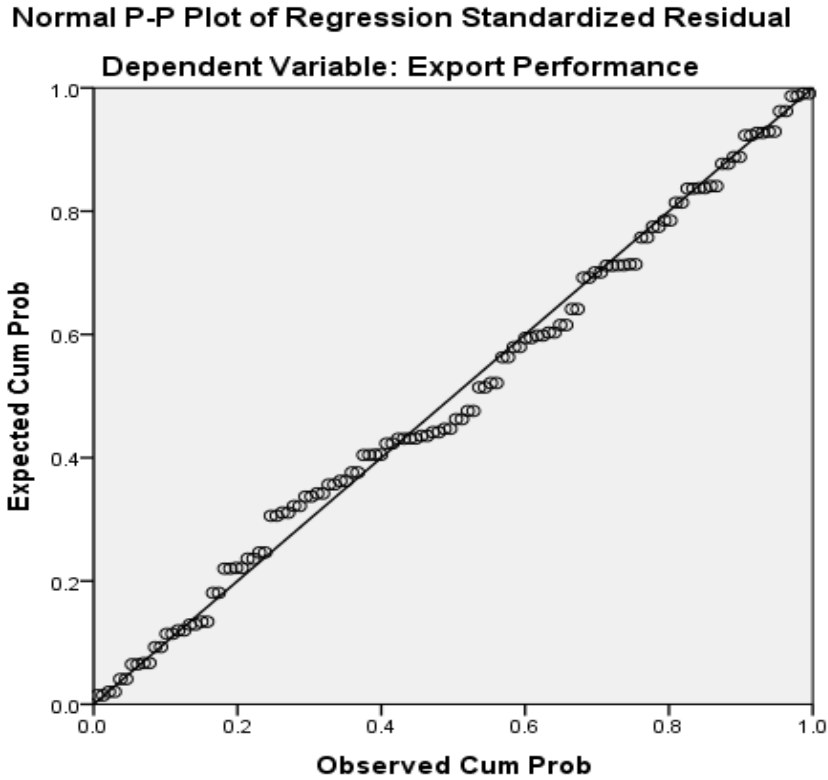
4.7.3 Assumptions of Regression Analysis

It is important to meet these assumptions before performing regression analysis. Violations of these assumptions can lead to biased or inaccurate results. A variety of diagnostic tests, such as residual plots and tests for normality can be used to check the assumptions of regression analysis. Accordingly, linearity, normality homoscedasticity, and absence of multicollinearity test and autocorrelation assumptions were carried out in the following.

1. Linearity Test

Linearity means that the predictor variables in the regression have a straight-line relationship with the outcome variable. As indicated under the below Fig 4.3, the P-P plot of residuals reveals no large deviation in the spread of the residuals that almost all residuals lay on the linear straight line. This indicates that the relationship between the independent variables and the dependent variable of the study is linear.

Figure 4.3 Linearity Test

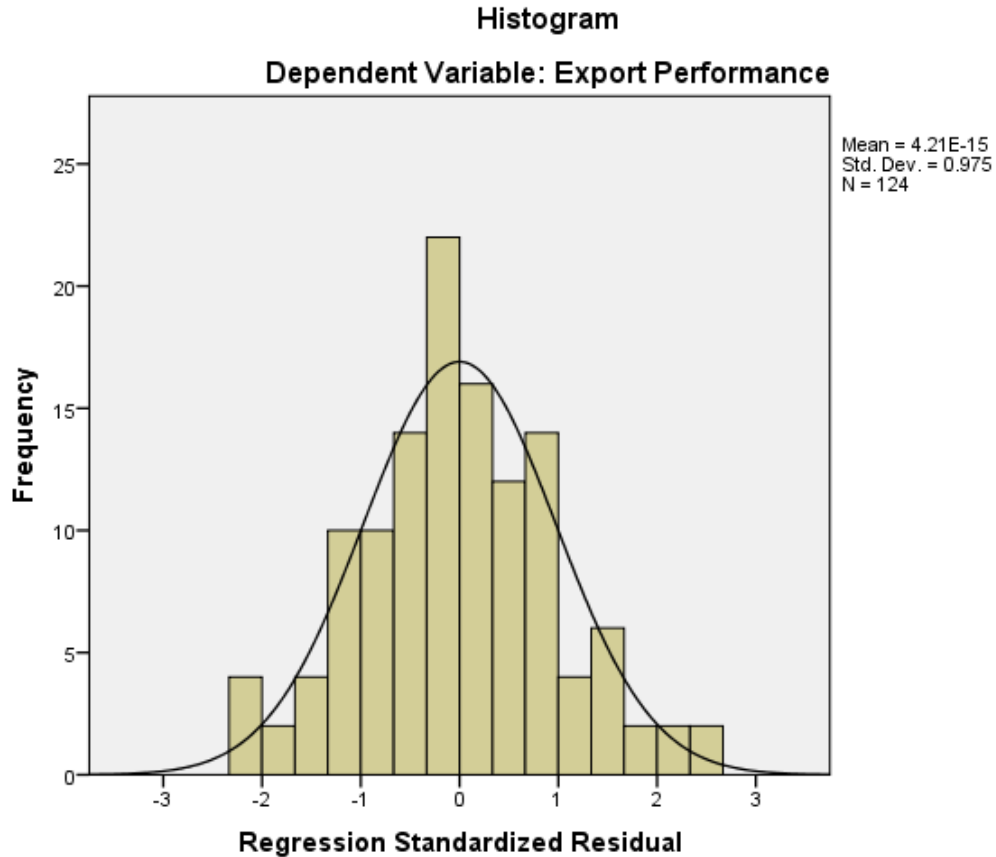


Source: Survey Result, 2023

2. Normality Test

This assumption is important since many statistical tests that are used in regression analysis rely on the assumption of normality. The distribution of the error term is normal (i.e., the residuals follow a normal distribution). As depicted in figure below, the bell-shaped histogram shows that scores lay in the center of the distribution. The standard residuals are not far away from normality curve that indicate residuals are closer to normality curve. The largest bars on the histogram are all around the central value.

Fig 4.4 Normality Test



Source: Survey Result, 2023

3. Multicollinearity Test

Multicollinearity refers to a situation in which two or more independent variables are very closely correlated. The independent variables must not be highly correlated with each other. If there is multicollinearity, it can be difficult to determine the individual effect of each independent variable on the dependent variable. According to Andy (2006), the variance inflation factor (VIF) value is larger than 10 and the tolerance value with less than 0.1, indicates multicollinearity among the independent variables.

Accordingly, from table 4.6 the result of multicollinearity test suggests that all independent variables had a tolerance greater than 0.1 and a VIF value less than 10, which means there is no multicollinearity between the variables of the study.

Table 4.6 Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Company Problems	.924	1.082
	Product Problems	.793	1.261
	The Institutional Support related barriers	.583	1.716
	Government Policy and Regulation related Barriers	.588	1.702
	Domestic Export Industry Barriers	.517	1.935
	Foreign Export Market Barriers	.743	1.345

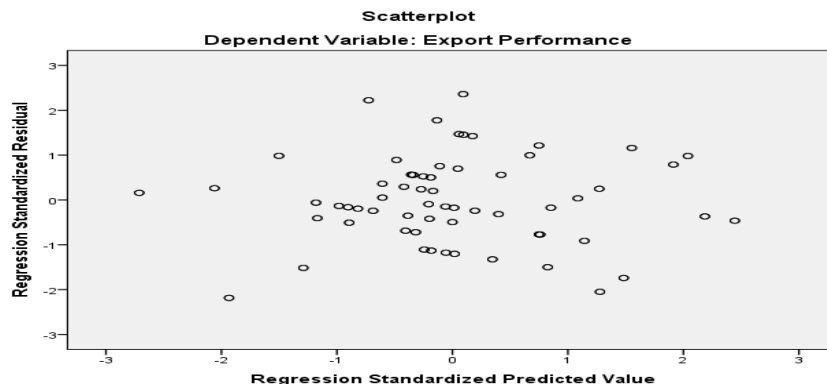
Dependent Variable: Export Performance

Source: Survey Result, 2023

4. Homoscedasticity Test

Homoscedasticity refers to whether these residuals are equally distributed, or whether they tend to bunch together at some values, and at other values, spread far apart. In the context of t-tests and ANOVAs, you may hear this same concept referred to as equality of variances or homogeneity of variances. Therefore, as indicated under figure 4.5 below, the assumption of homoscedasticity is not violated.

Figure 4.5 Homoscedasticity Test



Source: Survey Result, 2023

5. Autocorrelation Test

Autocorrelation refers to the degree of correlation between the values of the same variables across different observations in the data. This assumption can be verified with the Durbin-Watson test, which tests for serial correlations between errors and the value of the required statistics should be 1.5 to 2.5 to be reflected non-autocorrelation. As a result, the result of the Durbin Watson estimate reveals a value of 1.643, which indicates that the independent variables are exogenous and that the explanatory variables have a lower serial correlation.

4. 8 Multiple Regression Analysis

Multiple regressions generally explain the relationship between multiple independent or predictor variables and one dependent or criterion variable. A dependent variable is modeled as a function of several independent variables with corresponding coefficients, along with the constant term. Multiple regressions require two or more predictor variables, and this is why it is called multiple regressions.

Table 4.7 Model Summary

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.821	.674	.657	.266	1.643
a. Predictors: (Constant), Firm barriers, Product barriers, The Institutional Support related barriers, Government Policy and Regulation related factors, Domestic Export Industry Barriers, Foreign Export Market Barriers					
b. Dependent Variable: Export Performance					

Source: Survey Result, 2023

R value indicates the quality of the prediction of the dependent variable. From the above table 4.7, the model summary ($R=0.821$), indicates that the cumulative coefficient of the independent variables has a positive and very strong level of prediction on dependent variable.

R Square or the coefficient of determination indicates the proportion of variance in the dependent variable that can be explained by the independent variables in a regression analysis. The value of R Square = $.674$ means that the independent variables included in the regression analysis explain about 67.4% of the variation in the dependent variable and the remaining 32.6% explained by external variables that were not considered in this regression model. The adjusted R Square = 0.657 , indicates that 65.7% of the variation in the independent variable is explained by the predictors, after adjusting for the number of independent variables in the model.

The Durbin Watson static is a test used to determine whether there is autocorrelation in the residuals (unexplained variation) of the regression model. The value close to 2 indicates that there is no autocorrelation in the residuals, which is the desired result. From the above table 4.7, the value of Durbin Watson= 1.643 , indicates that there is a moderately positive autocorrelation in the residuals of the regression analysis. It also suggests that, the independent variables are exogenous and that the explanatory variables have a moderate positive serial correlation.

4.9 ANOVA Analysis

ANOVA (Analysis of Variance) is a statistical technique used to compare the means of two or more groups. It is used to determine whether there is a significant difference between the means of the groups being analyzed, considering the variability within each group. ANOVA works by comparing the variability between groups (treatment effect) to the variability within each group (error effect). The ratio of these two sources of variability is called the F-ratio.

Table 4.8 ANOVA Model

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	17.141	6	2.857	40.240	.000 ^b
	Residual	8.306	117	.071		
	Total	25.447	123			
a. Dependent Variable: Export Performance						
b. Predictors: (Constant), Company Problems, Product Problems, The Institutional Support related barriers, Government Policy and Regulation related barriers, Domestic Export Industry Barriers, Foreign Export Market Barriers						

Source: Survey Result, 2023

As indicated above table 4.8, F=40.240 refers to the F-ratio, which is a measure of the variation among the groups in comparison to the variation within the groups. In this case, the F-ratio is quite high. This suggests that significant differences exist between the means of the groups being compared. Sig.=.000 refers to the p-value or significance level. It indicates the probability of obtaining the observed results by chance alone; assuming the null hypothesis (that there is no significant difference between the groups) is true. A p-value of .000 indicates that the observed results are extremely unlikely to have occurred by chance alone. Thus, this result is statistically significant and provides evidence for rejecting the null hypothesis and concluding that there is a significant difference between the means of the groups being compared.

4.10 Coefficients for the Multiple Regressions

The regression coefficient (also known as beta coefficient or slope) indicates the change in the dependent variable for a one-unit change in the independent variable, while holding all other independent variables constant. A larger beta coefficient for an independent variable indicates that a one-unit change in that variable has a larger effect on the dependent variable than a one-unit change in other independent variables. Therefore, larger beta coefficients support the

importance of the corresponding independent variables in predicting the dependent variable. However, it is important to note that the size of the beta coefficient alone does not necessarily indicate the practical significance or causal direction of the relationship.

The beta coefficient is a measure of the strength and the direction of the relationship between the independent and dependent variable. The contribution of each independent variable to the multiple linear regression models and their statistical significance are shown in below table 4.9.

Table 4.9 Coefficients for the Multiple Regressions

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.494	.276		1.792	.076		
	Company Problems	-.009	.033	-.016	-.284	.777	.924	1.082
	Product Problems	-.129	.045	-.171	-2.884	.005	.793	1.261
	Institutional Support related barriers	.387	.073	.368	5.319	.000	.583	1.716
	Government Policy and Regulation	-.037	.064	-.040	-.574	.567	.588	1.702
	Domestic Export Industry Barriers	.048	.070	.050	.684	.495	.517	1.935
	Foreign Export Market Barriers	.614	.056	.668	10.900	.000	.743	1.345

a. Dependent Variable: Export Performance

Source: Survey Result, 2023

From the above table 4.9, the coefficients of the standardized estimation result show that foreign export market barrier have highest beta coefficient ($\beta=.668$, $p<0.05$), which implies that it have higher importance of the predictor and 1 unit change in foreign export market will cause 66.8% positive increase in export performance of firms. It is followed by the institutional support related environment ($\beta=.368$, $p<0.05$), which has 36.8% of the factors to the export performance of the firms under investigation.

From table 4.9, it can be also explained that three of the explanatory variables make a significant contribution to the model prediction, including the foreign export market barriers, institutional support related barriers and product barriers have Sig. Value <0.05 , indicating the significant relationship with the export performance of fruit and vegetable exporters in Ethiopia. On the other hand, the other predictors (Company problems, policy and regulation environment as well as the domestic export market environment) have Sig. value >0.05 , demonstrating that there is not enough data to draw a conclusion about a significant relationship between these variables and a firm's export performance.

The VIF (Variance Inflation Factor) is also calculated to detect the severity of multicollinearity among the independent variables. According to Corporate Finance Institute (2020), if VIF value is above 10 or tolerance is below 0.1, there is a significant multicollinearity, and further investigation is required. Accordingly, from table 4.10 we can conclude that the value of VIF of all independent variable is less than 10 and tolerance value is greater than 0.1; this suggests that there is no multicollinearity present in the model.

4.11 Hypothesis Testing

Based on the existing literature and expert opinions in fruit and vegetable export industry, six hypotheses were constructed to empirically examine their statistical significance on the export performance firms. The summary of the result generated by multiple regression analysis is validated in table 4.10 below.

Table 4.10 Hypothesis Test Result

Hypothesis	Result	Reason
H1. Barriers inside the exporting company have a negative and significant effect on fruit and vegetable export performance.	Rejected	$\beta = -.016$ $p > 0.05$
H2. Product related barriers have a negative and significant effect on fruit and vegetable export performance.	Accepted	$\beta = -.171$ < 0.05
H3. Institutional support related barriers have a negative and significant effect on fruit and vegetable export performance.	Accepted	$\beta = .368$ $p < 0.05$
H4. Government rule and regulation related barriers have a negative and significant effect on fruit and vegetable export performance.	Rejected	$\beta = -.040$ $p > 0.05$
H5. Domestic export market industry barriers have a negative and significant effect on fruit and vegetable export performance.	Rejected	$\beta = .050$ $p > 0.05$
H6. Foreign market industry barriers have a negative and significant effect on fruit and vegetable export performance.	Accepted	$\beta = .668$ $P < 0.05$

Source: Survey Result, 2023

From the above table 4.10, we can conclude that, product related barriers, institutional support related barriers and the foreign market industry have the significance value (p-value) of less than the standard level of significance (0.05), this means that the relationship between this predictor and the outcome variable (export performance) is statistically significant. Therefore, these hypotheses are accepted. On the other hand, the other independent variable (company related barriers, policy and regulation related barriers as well as the domestic the export market industry) have p-value of > 0.05 , which implies that there is no statistically significant relationship with the export performance of firms under consideration.

Finally, as of the result of Yeabsira T. (2014) the Ethiopian fruit and vegetable exporters were challenged by the lack of managerial and technical skills, and lack of commitment by employees, respectively. Externally, by lack of credit facilities, supply of inputs, followed by lack of infrastructure. On the other hand, this survey showed that though all the studied variables negatively affects the export performance of fruit and vegetable the most highly affecting factors are foreign industry barriers followed by institutional support related and product related barriers respectively.

4.12 The Result of Qualitative Data

In addition to the structured questionnaires examined above, the researcher also added an open-ended questionnaire to the selected respondents from the selected companies. Below is a summary of the result

1. **Product perishability:** the perishability of fruits and vegetables impacts their export performance by influencing shelf life, necessitating quality control measures, requiring cold chain infrastructure, affecting compliance with the export regulations and considering market access. Thus, it is difficult to transport the products from the farming to the final destination (consumer) while maintaining their original quality.

2. **Seasonality of Ethiopian Production:** Similar to the majority of agricultural crops, seasonal trends play a significant role in fruit and vegetable production, processing, and marketing. These seasonal trends have an adverse effect on the performance of fruit and vegetable exports. According to Sisay M.A(2018) ,Since many of the growers are growing out door, it is hard to keep promises with customers to supply year-round. It is not practical to grow in the rainy season. Therefore, the customers shift their face to the other countries' exporters to get a year-round supply.

3. **Sustainability challenge:** involves climate change adaptation and mitigation as well as other unfavorable weather phenomena, biodiversity conservation, social sustainability and land competition.

4. **National Inflation:** As of NBE Annual Report (2021/22), annual average headline inflation rose to 33.8% in 2021/22 from 20.2% a year ago.

National inflation can affect the export performance of fruit and vegetable in several ways: the cost of production such as labor, energy & transportation may increase; the currency may depreciate against other currency, may affect demand of importing countries negatively, the government may respond to inflation by implementing trade policy such as export restrictions, import tariffs, or subsidies. Recent price hikes in the country for labor, raw materials, and fruit and vegetable commodities are adversely affecting the export performance of these products.

5. Poor Development of Agricultural Sector: Ethiopian farmers' inefficient harvesting and post-harvest handling practices, which result in disparities between the quality and level of fruit and vegetable, are to blame for the poor quality of our fruit and vegetables, which in turn contributes to the instability of Ethiopia's fruit and vegetable export revenues.

6. Political instability: The production and availability of fruit and vegetables is affected by the political unrest in various regions of the country. Furthermore, some the respondents respond that the political crisis between Ukraine and Russia affects the whole market supply and demand balance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary

The main objective of the research was to examine the variables affecting fruit and vegetable export performance to Ethiopia. The study examined six key external and internal components within the main objective of the study. The organizational and product-related barriers formed the internal factors. The external variables included the regulatory environment, export industry and market barriers, institutional support environment, government policy and regulatory environment, and regulatory environment. A mixed research methodology was used to accomplish the investigation's goal, using qualitative and quantitative methods.

Both primary and secondary data sources were used to collect appropriate and trustworthy data to achieve the research objective by answering the research questions. In order to obtain the desired information, the primary data was collected from fruit and vegetable export companies. Finally, descriptive and inferential statistics were applied to examine the data collected from different sources to obtain meaningful facts and conclusions. Against this background, the research results are summarizing as follows:

The result of the descriptive analysis shows that the average value of the internal barriers is 3.61 (company: 3.18; products: 4.06) with a standard deviation of 1.11, indicating that the respondent only partially agrees with the statements on internal barriers, that affect the fruits and vegetables export performance of companies in contrary to Digafe's result of 2013 that reveals that majority of the fruit and vegetable exporters are facing with lack of skilled manpower especially horticultural specialists. He also noted that even though higher education institutions have begun to train students in the area in the past few years, they are small in number and also he asserted that the students lack practical knowledge.

The outcome of the correlation analysis demonstrates that there is no statistically significant link between firm barriers and export performance when the Sig (2-Tailed) value of the firm barrier is

bigger than 0.05. As a result, with a Sig (2-tailed) value smaller than 0.05, all other independent variables have a significant and positive correlation with the dependent variable.

The summary of regression model ($R=0.821$) shows that the linear combination of the six independent variables strongly predicted the dependent variable. The result of $R^2=0.674$ implies that the linear combination of the study's predictor variables explains 67.4% of the variance in export performance and the remaining 32.6% is described by extraneous variables not included in this regression model. The result also shows that the difference from the final model is; R^2 and adjusted R^2 ($0.674 - 0.657 = 0.017$), which is approximately 1.7%. That is, if the model were derived from the population rather than from a sample, the variance in the result would be about 1.7% less. The result of the Durbin-Watson estimate shows a value of 1.67, which means that the explanatory variables have a lower serial correlation between the explanatory variables and independent variables are exogenous.

The result of the ANOVA analysis shows that F is 40.240, which is quite high. This indicates that there are significant differences between the means of the compared groups. $\text{Sig}=.000$ refers to the p -value or significance level. It gives the probability of obtaining the observed results by chance alone, provided the null hypothesis (that there is no significant difference between the groups) is true. A p -value of 0.000 indicates that it is extremely unlikely that the observed results were due to chance alone. Thus, this result is statistically significant and provides evidence for rejecting the null hypothesis and concluding that there is a significant difference between the means of the groups compared.

To end with, the outcome of the hypothesis testing demonstrates that, with a 95% confidence interval and a sign value of 0.05, all other variables, excluding company barriers, government policies and regulatory environment and export industry barriers; the product related barriers, institutional support environment factors, and foreign export market barriers, have a significant negative impact on the export performance of fruit and vegetable exporters. When compared with the result of Motuma S. (2021) in the context of coffee export performance challenges the result of the survey revealed similar outcome on factors of institutional support environment, export market barriers which is contextually similar with the variable of foreign export market barrier have a significant impact on the export performance.

5.2 Conclusion

As an engine of growth and a source of foreign exchange for importing goods and services, export sales have become increasingly important for most countries and regions, including Ethiopia. Increasing exports are sometimes seen as an important factor in the development and progress of developing countries. Exporters contribute to the country's exports, raising the average living standard of its citizens. While exporting companies are vital to the country's economic growth, they are hindered by a number of variables.

In light of this, it was proposed that this study examine the factors affecting Ethiopia's fruit and vegetable export performance. Six elements have been identified to do this under the external and internal factors. The internal factors were generated by the organizational and product-related barriers. The external barriers included the institutional support environment, the government policy and regulatory environment, the export industry barriers, and the export market barriers.

The outcome of the descriptive analysis demonstrates that the respondent only partially agrees with the statements on the internal barriers that have an impact on the companies' ability to export fruits and vegetables. The average value of the internal barriers indicates this. Additionally, respondents agree with the discovered statements impacting the success of enterprises exporting fruit and vegetables, according to the average assessment of all external barriers.

Additionally, the researcher used inferential statistics. The outcome of the correlation analysis demonstrates that there was little association between export performance and company and product barriers. It reveals that there is a slight but favorable correlation between them. All external factors and export performance, however, are strongly and favorably correlated. According to the results of the regression analysis, the linear combination of the independent variables strongly predicted the dependent variable, the study's predictor variables account for 67.4% of the variance in export performance, and the remaining 32.6% of the variance in export

performance is explained by extraneous variables, which are excluded from this regression model.

Because the p-value is less than 0.005, we can conclude from the ANOVA estimation result that all explanatory factors are overall significant. As a result, all of the model's explanatory variables can be used to explain changes in overall export performance. Most of the explanatory variables contribute significantly to the model prediction, according to the coefficients of the standardized estimation result, which are derived from the coefficients of the regression analysis. Therefore, from the results we can conclude that all external barriers have a significant impact on Ethiopian companies exporting fruit and vegetables.

5.3 Recommendations

On the basis of the study's findings, the following suggestions are made:

- ✚ Government institutions play an important role in boosting Ethiopia's fruit and vegetable export performance. Therefore, the focus should be on creating an enabling policy environment and increasing the reliability of the services of export support institutions.
- ✚ The government should combine the imports of international high technology and domestic independent research to increase the competitiveness of the fruit and vegetable export sector.
- ✚ Policy makers should be required to develop and implement regulations and policies that help mitigate the risks associated with exporting such as trade agreements and legal frameworks for resolving disputes.
- ✚ Policy makers should develop various programs to improve access to supply-side factors such as finance and high technology and increase exporters' productivity in order to grow significantly so that they can increase their ability to meet the global quality standard for their products.
- ✚ EHPEA needs to be in regular contact stay with exporters to ensure better follow-up. The association must participate in international trade fairs where companies in the industry hold in order to promote product diversity and expand the country's market access. Additionally, due to the dynamic environment of international trade, it is expected that regular training will also be provided to keep the companies up to date

- ✚ Exporters should invest in and use technological innovations such as improved storage, transport techniques, cold storage facilities and other innovative post-harvest technologies to ensure the quality of their produce is maintained and shelf life is extended
- ✚ Supportive institutions, particularly EHPEA should have to work in collaboration with government institutions like Ministry of Trade and Ministry of Agriculture to uphold technological innovation by providing technical assistance, conducting a research, providing financial support, and creating an enabling and attractive environment in the sector to enhance the exporting performance of the country.
- ✚ Finally, policy makers should focus on updating a conducive policy environment from time to time to increase the reliability of the services of export support institutions.

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Appendix-1; Questionnaire

Addis Ababa University

College of Business and Economics

Graduate Program in International Business

Survey on Determinants of Fruit and Vegetable Export Performance in Ethiopia

Dear Respondents,

I am a graduate student in the Department of Management at the College of Business and Economics, Addis Ababa University. I am working on a research project to assess “**The determinants of fruit and vegetable export performance in Ethiopia**”. Therefore, I kindly ask you to help me to fill out the attached questionnaire as much as possible based on your knowledge and experience of fruit and vegetable export barriers.

I genuinely promise that the data you share will be treated in strict confidence and used only for scientific research. Your dedication is regarded as a significant factor in the caliber of these research findings. Please indicate your opinion by ticking (√) for each closed question and describe the corresponding reason for the open question.

Yours Faithfully,

Jabesa Boja

Email address: jabesab@yahoo.com

Part I: Demographic Profile of Respondents

1. **Educational Level:** Certificate Diploma Holder
First Degree Holder Master's Degree
Above Master's

2. Position in the Company;

- Export Expert General Manager
Export Manager Other, please specify _____
Marketing Manager

Part II. Information of the business Firm

1. Years of experience in the Fruit and Vegetable Export Business;

- Under 5 Years Between 16-20 Years
Between 6-10 Years Above 21
Between 11-15 Years

2. Legal formation of the Firm;

- Sole Proprietorship Share Company
Joint-Venture Public Enterprise
Cooperative Union Private Limited Company

3. Export Destination in number of Countries

- Between 1-5
Between 6-10
Between 11-15
More than 16 countries

Part III. Determinants of Fruit and Vegetable Export Performance in Ethiopia

Instruction: Please indicate your choices by ticking (√) with each of the statements from the options that range from ‘strongly disagree’ to ‘strongly agree’.

Select 1 = If You Strongly Disagree (SD); 2 = If You Disagree (D); 3 = If You Neither Agree nor Disagree (N); 4 = If You Agree (A); and 5 = If You Strongly Agree (SA) with the Statement

I. The Internal barriers Affecting Fruit and Vegetable Export Performance						
S.N	A. Barriers inside the exporting company	1	2	3	4	5
1	Our company's export performance suffered from a lack of understanding and information about export marketing.					
2	There is lack of management commitment to develop export activities in our company					
3	Our company's export business is suffered from inadequate financing					
4	Lack of qualified and experienced human capital impacted our company's export business					
5	Our business have no a competitive export marketing strategy					
B	Export Product related Barriers	1	2	3	4	5
1	Our export performance has been impacted due to low value addition to exportable fruits and vegetables					
2	Our fruit and vegetable export has been exposed to rejection, renegotiation, and re-pricing due to its perishability					
3	Poor quality control techniques affected our company’s export performance					
4	Our Packaging and Labeling is inadequate compared to the requirement of the world market standards					
II. External Barriers Affecting Export Performance of the Firms						
A	The Institutional Support related barriers	1	2	3	4	5
1	The formation of the Ethiopian Horticulture Producer Exporters					

	Association (EHPEA) has not contributed to the increase in fruit and vegetable exports					
2	The institutions that support the production, distribution, and price discovery of fruits and vegetables are inefficient					
3	Ethiopian export-supporting institutions are corrupt and overburdened with unnecessary bureaucracy					
4	Government institutions are ineffective at enhancing export procedures, export training, and market research					
5	The performance of the fruit and vegetable export industry is impacted by inadequate technology transfer and research development in agriculture					
B	Government Policy and Regulation related Environment	1	2	3	4	5
1	There is inconsistency of government policy (National Bank directives, Exchange Rate, Tax and Trade Policy)					
2	Government support for financing export activities and offering export incentives is inadequate					
3	The government policy and regulation are ineffective to promote the market integration of Fruit and Vegetable trade					
4	Public and foreign direct investment contribution in the production and export of fruits and vegetables are low					
5	Fruit and vegetable exporters are vulnerable to export market risks due to the lack of risk management systems					
C	Domestic Export Industry Barriers	1	2	3	4	5
1	Large domestic market for Fruit and Vegetable is a threats to improvement of Fruit and Vegetable export performance					
2	In the domestic market, there is fierce competition with other exporters of fruits and vegetables.					
3	Low levels of technology adoption have affected our ability to supply high-quality fruits and vegetables to the global market					

4	Poor access to foreign market have adversely affected Fruit and Vegetable export performance					
5	Our export performance is affected by the supply-side constraints to produce and export Fruit and Vegetables					
D	Foreign Export Market Barriers	1	2	3	4	5
1	Ethiopia is vulnerable to price volatility since it cannot set the global price of fruits and vegetables.					
2	Our export is affected due to the cultural and linguistic disparities with the importing countries					
3	There are delays with export settlement					
4	The export documentation, paperwork and procedures are complex					
5	Our export performance was impacted by various trade restrictions we encounter abroad					
F	Export Performance	1	2	3	4	5
1	Our company constraints have an impact on our company's export performance.					
2	The quality of our fruit and vegetable have an impact on our export performance					
3	Institutional support environment has influenced on our company's ability to export.					
4	Government policies and the regulatory environment have an impact on our company's ability to export.					
5	Barriers in the export business have an impact on our company's export performance.					
6	Export market hurdles hinder our company's export performance					

Part IV. Please list any additional variables that might have an impact on Ethiopia's fruit and vegetable export performance. _____

Your cooperation is much appreciated!